

# FUTURA



**ANNUAL REPORT 2019**  
PROJECTS, INITIATIVES & COLLABORATIONS

# Executive Summary

Futura, Aruba's national innovation lab, leads pioneering projects, initiatives and collaborations to accelerate purposeful innovations. Our approach is to offer a platform where the public sector, private sector and citizens can work more openly, collaboratively, and creatively to increase the innovation capacity of the island.

Futura's main purpose is to cultivate an innovation economy focusing on unleashing the innovation capacity from within through social innovation, talent cultivation, and collaboration. Further, Aruba's biggest transformation awaits with the implementation of its upcoming eGovernment Roadmap which provides a digital transformation plan as a catalyst for transparency and strengthening institutions. With this roadmap, Aruba seeks to better serve its citizens and create new pathways for achieving future economic resilience. Futura currently supports the implementation of the Government's digital transformation agenda and the establishment of an eGovernment coordination team within the Government.

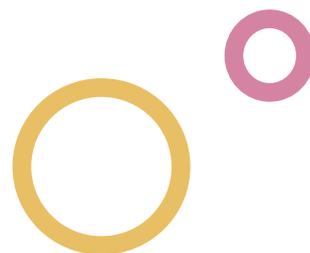
Futura's strategy is based on the framework Aruba Innova 2030, which prioritizes five innovation spaces (discussed in more detail in this report). Futura's projects and initiatives are aligned with Aruba's National Strategic Plan (NSP). The focus is to accelerate innovation in order to achieve the U.N. Sustainable Development Goals (SDGs) adopted by Aruba by 2030.

In 2019, Futura led and/or collaborated on more than 40 projects, initiatives, and (co-)hosted over 50 events and workshops across a wide variety of innovation stimulating topics. This report provides an overview of each of the projects and their impact. This report also highlights key strategic partners who played an important role in the development and implementation of the listed projects.

Futura will continue to play an active role in fostering Aruba's innovation ecosystem in 2020 and we look forward to expanding our network of innovators and change-makers.

**Cheers to this new decade!**

Report Published: January 2020.



# About Futura

Aruba Futura Foundation (hereinafter: Futura) was established on May 7, 2018 with the purpose to aid in the design, development and implementation of a national innovation strategy for Aruba. Futura has received the mandate to implement the Government of Aruba's human-centered national innovation plan, named *Aruba Innova 2030*.

Futura serves as a national innovation lab and SDG solutions lab = SDG Innovation Lab. Futura is partly supported by the innovation team of the Ministry of Innovation, which resorts under the Prime Minister of Aruba, Evelyn-Wever Croes. The team is led by the Aruba Government's Chief Innovation Officer, Varelle Croes.

## Aruba Futura Foundation Board Members

The 2019 board consisted of 3 members:

*Florisella Wernet*

*Varelle Croes*

*Edison Briesen*

## Team Members

*Amedee Wever*

*Eugene Wilson*

*Francois Croes*

*Jefryene Dijkhoff*

*Marianyela Pereira*

*Richelle Chirino*

*Robin de Leijer*

*Ulrich Hermans*

*Xavier Simileer*



# Futura: The SDG Innovation Lab

At the onset of the adoption of the 2030 Agenda and the U.N. Sustainable Development Goals (SDGs), Aruba has been committed to implementing the SDGs. This unwavering commitment, leadership and endorsement of the U.N. Sustainable Development Goals is matched by the Government of Aruba moving towards finding alternative development pathways that can drive progress in a Small Island Developing State (SIDS) specific context. In other words, Aruba is accelerating its efforts to become an Incubator of Sustainable Island Solutions.

Futura, aims to increase collaboration among various partners and stakeholders to accelerate the SDGs through purposeful innovation. The soon to be released Aruba National Strategic Plan (NSP) is in line with the SDG roadmap that was created with assistance from the United Nations. Futura's projects and initiatives are aligned with the National Strategic Plan to accelerate innovation to achieve the U.N. Sustainable Development Goals by 2030.

Futura will continue to align its current and future projects and collaborations with the U.N. Sustainable Development Goals framework, creating awareness and building capacity for a more resilient future. All projects, initiatives or collaborations included in this report are aligned with the U.N. Sustainable Development Goals.



# Strategy

Futura's main purpose is to cultivate an innovation economy focusing on unleashing the innovation capacity from within through social innovation, talent cultivation, and collaboration.

Futura's strategy is based on the roadmap Aruba Innova 2030, which prioritizes five innovation spaces to help develop a thriving innovation ecosystem. Futura's projects and initiatives are aligned with Aruba's National Strategic Plan (NSP). The focus is to accelerate innovation in order to achieve the U.N. Sustainable Development Goals (SDGs) adopted by Aruba by 2030.

*"We believe that our people are our biggest asset and our human-centered innovation strategy puts the prosperity of the Aruban citizens first. Futura is committed to the U.N. Sustainable Development Goals and aims to create awareness and drive actionable results to achieve these goals by 2030."*

## Our Approach

Our approach is to offer a platform where the public sector, private sector and citizens can work more openly, collaboratively, and creatively to increase the innovation capacity of the island. We design, lead and collaborate on pioneering projects and initiatives to accelerate purposeful innovations.

## How We Do It

**Build** – We co-design, test prototypes and collaborate on innovative ideas, projects or pilots that stimulate the innovation capacity of the public sector, private sector and citizens (including children and youth).

**Share** – We share knowledge through workshops and think-tank sessions, and we facilitate the development of new programs and products through open design-thinking sessions for our partners.

**Connect** – We collaborate with local and international partners on pioneering initiatives to stimulate the knowledge and innovation capacity of the Aruban community.



Aruba Innova 2030 is a guiding framework to help Aruba better prepare for the future and guide policy decisions. The framework prioritizes five innovation spaces.

## Innovation Spaces and their Objectives

### eGovernment

Redesign government administrative procedures for efficiency, transparency, and improving people's lives.

- Improve the citizen experience of government services
- Build capacity of the public sector
- Facilitate 'ease of doing business' through innovation and technology
- Increase productivity of work force
- Increase trust and transparency in government

### Social Innovation

Introduce policies and programs that focus on the people's well-being, personal advancement and values to be instilled in the society.

- Accelerate implementation of U.N. Sustainable Development Goals
- Increase youth participation in economy and civic sector
- Encourage an innovation mindset

### Talent

Talent cultivation and retention with a focus on the skills needed in a future work-force and develop a system to be able to rapidly adapt to changing skill requirements in the Promising Sectors identified in the Government's economic policy.

- Equip youth with tools and knowledge to succeed in the future
- Stimulate life-long learning
- Encourage diaspora involvement and brain gain

### Entrepreneurship

Foster an entrepreneurial mindset and improve business climate for startups and SMEs, with a focus on the Promising Sectors.

- Foster a thriving entrepreneurial ecosystem
- Kickstart incubator programs
- Develop investment friendly climate
- Stimulate access to seed and venture capital

### Smart Society

Develop key arenas of collaboration between the public and private sectors and citizens to increase engagement and awareness in developing smart city and circular economy policies.

- Develop new solutions that solve complex problems and meet the needs of society
- Encourage evidence-based decision- and policy-making
- Facilitate access to data and knowledge-sharing

# Key Milestones

A number of strategic innovation initiatives were launched or completed in 2019 and a large number of local change-makers were engaged. These initiatives were designed to the priority spaces of Aruba Innova 2030 framework and the U.N. Sustainable Development Goals.

## Timeline

### January

- Study Mission Estonia eGovernance Academy
- Mil Idea: Final Pitch Night
- Futura Website Launch
- Citizen Science: Tensor Flow Workshops

### February

- Design Thinking Immersion Week
- eGovernance Academy Aruba Mission
- Aruba Innovation Summit 2019
- 100 Innovations Program Design

### March

- Innovation Collective: Venture Mapping
- Columbia University Capstone Projects

### April

- Columbia University Capstone Projects
- Happy Flow 2.0
- Global Money Week

### May

- Aruba Youth Impact Series
- eLearning Pilot Phase 1

### June

- SDG Games at Primary Schools

### July

- Aruba Maker Expo
- Innovation Camp for Kids
- Advanced Coding Workshop for Kids

### August

- Planning Mo-B Lab Year 2
- Mo-B Lab Teacher Sessions
- eLearning Pilot Project: Cacique Macuarima & Atarima
- AREA- Survey Caya Grandi
- Design Thinking for Kids Cas di Cultura
- University of Aruba Orientation Week

## September

- WOW Collaboration: Dare to Be Seminar
- 1st Outstanding Innovator Award

## October

- Immerse Innovation Week
- Futura Café Pop-Up: Creative Hub
- Supernova: Experimental Studio for Girls
- SPACES
- ABIA Launch
- 2nd Outstanding Innovator Award

## November

- UN Women Forum in Aruba
- Mo-B Lab Teacher Sessions

## December

- AREA: Events & Initiatives



# Projects Highlights by Innovation Space

After a successful kick-off year in 2018, we aligned our initiatives by actively engaging our main collaborators and streamlining our innovation partnerships. The following key steps were taken during 2019 to facilitate the design and implementation of the projects listed in this report:

- Introduced a human-centered design thinking framework
- Prioritized collaboration and innovative partnerships
- Optimized use of digital tools to maximize efficiency

The following pages contain a summary of key innovation projects and initiatives led by Futura or where Futura played a key collaborator role during 2019.

***“There’s a way to do it better - find it.”***  
– Thomas A. Edison

## eGovernment

Futura is supporting the Government in the development of its eGovernment roadmap with support from knowledge- and strategic partners, including, Columbia University, Estonia eGovernment Academy, The Central Bank of Aruba, and the University of Aruba. The roadmap, currently under review, is expected to be published by the Government in Q1 2020. Key stakeholders were involved and consulted throughout the process.

### eGovernment Roadmap Development



*Project Lead: Futura and Government of Aruba*  
*Collaborators: eGovernance Academy Estonia*

Following an analysis of global eGovernment leaders and benchmark studies, it was decided to partner with Estonia’s e-Governance Academy (eGA) to develop the capacity required for the design of an eGovernment model for Aruba. In January 2019, a delegation consisting of heads of key Government departments, senior advisors of various Ministries, and other public sector representatives attended a 4-day study mission at the Estonia eGovernance Academy in Tallinn. Following the study mission, in late February 2019, expert consultants from Estonia’s eGovernance Academy completed an on-site mission in Aruba. The goal of the on-site mission was to advise Aruba on its key eGovernment principles. The initial focus was to establish key areas of opportunity and identify the most vital processes that can be digitized first. The expert consultants met with key stakeholders within the public sector and private sector partners during their visit. A comprehensive presentation on Estonia’s eGovernment model was also presented at Futura’s 2019 Innovation Summit. Following the missions, the eGovernment roadmap was developed in consultation with stakeholders through December 2019. The recommended model, together with findings from previous local studies and input from various stakeholder platforms form the basis of the eGovernment Roadmap.

The findings and recommendations of eGA are summarized in its report: Aruba Mission Report, April 2019. The Aruba Government's eGovernment Roadmap will be published in Q1 2020.

### *Impact*

- Developed eGovernment Roadmap
- Built capacity and stakeholder buy-in
- Confirmed commitment from stakeholders
- Engaged key stakeholders in defining the eGovernment vision

### **Columbia University Capstone Projects**



### *Project Lead: Futura*

*Collaborators: Columbia University, Government of Aruba and Free Zone Aruba N.V.*

The capstone projects were 6-month research and consulting projects as part of the graduation requirement of the graduate program of the School of International and Public Affairs at Columbia University New York. The goal of the capstone projects was to provide the Government of Aruba with practical recommendations on defined areas, while giving the students the opportunity to gain experience with solving real-world problems. Two groups of 8 graduate students focused on two different themes, namely, the Aruba Free Zone and the human side of eGovernment.

### *Capstone 1: Toward a Digital Aruba; Increasing readiness of Arubans and Aruba's civil servants for eGovernment*

The students conducted desk-research and a comparative case study analysis, and subsequently provided an actionable policy and plan of action for establishing the readiness of public servants and Arubans citizens to embrace a digitalized government.

### *Capstone 2: Reimagining Aruba Free Zones for Economic Diversification*

The students analyzed the current use of Aruba Free Zones and provided recommendations on new ways of attracting businesses and industries with possible focus on one or two of the promising sectors identified in the Aruba National Economic Policy. Opportunities for local and international strategic relationships were studied, while incorporating knowledge from best practices from around the world.

### *Impact*

- Conducted comprehensive market assessments and over 50 meetings/interviews with public and private stakeholders
- Presented high value studies and recommendations at no fee to the Aruba Government
- Developed a capacity building best practice guide for eGovernment, elements of which are incorporated in the eGovernment road map

## 100 Innovations



*Project Lead: Futura*

*Collaborators: To be determined in 2020*

The 100 innovations program is an open innovation competition kicking off in 2020. The program will encourage academia, NGO, public, private, and civic society to create solutions for societal challenges, while developing their human-centered design thinking skills. The program was designed in collaboration with stakeholders using a human-centered design thinking framework. The focus of the program will be on three thematic areas, namely, (i) people, (ii) planet, and (iii) prosperity. Participants will get the opportunity to submit their existing innovations or innovative ideas within these three themes. Potential ideas can include solutions for existing challenges that the Aruban community is facing, like waste management or ecological degradation. Potential ideas may also include the removal of a specific pain point, for example, queuing in lines for a public service.

### *Impact*

- Designed the program together with stakeholders using a human-centered design thinking framework
- Facilitated research on stakeholder needs

## Social Innovation

To cultivate an innovation mindset, Futura focuses on unleashing the innovation capacity from within by introducing programs and projects that increase the innovation capacity of the Aruban citizens.

### **Mil Idea: Final Pitch Night**



*Project Lead: Futura*

*Collaborators: Government of Aruba*

Mil Idea was a pilot project with the departments resorting under the Ministry of General Affairs. The intention was to develop a collaborative platform to empower public employees to come up with their

own solutions to their challenges. This initiative encouraged design thinking and created a safe space for sharing ideas. This helps to build trust within and across government departments. For purpose of the pitch, three priority themes were identified by the departments: Empowerment, Technology and Communication. The various departments were tasked with creating teams and present their solutions during the final pitch night in January 2019. During the final pitch night, two departments, namely, the Department of Information and Automatization (DIA), and the Department of Foreign Affairs (DBB) pitched their ideas. The final pitches were judged by three independent judges. Interestingly, both teams presented solutions for each other's challenges resulting in a tie. Both teams were awarded a small token of appreciation for their efforts and encouraged to work together to jointly present their recommended next steps to the Government.

### *Impact*

- Increased employee engagement
- Empowered employees
- Increased collaboration and trust

### **Aruba Youth Impact**



*Project Lead: Heart-Centered Leadership Foundation*

*Collaborators: Futura*

Futura partnered with the Heart-Centered Leadership Foundation (HCLF) to reach vulnerable youth through a structured approach. The Aruba Youth Impact Program is led by HCLF. The program targets vulnerable youth and focuses on engaging this particular group to become active citizens. The program incorporates design thinking for ideating innovative solutions to existing societal challenges.

The program now includes 7 sub-programs which are:

- **Impact Your Community:** Fostering the principles of serving and leadership. Impact Your Community embraces giving back. Community work, volunteering, a unique neighborhood project: youth decides what or who they would like to give attention to during this day.
- **Impact Café:** Creating and promoting a safe space where young people can come together, share ideas, and propose solutions to issues they experience in their community, at school, and at home. Impact Café offers youngsters the opportunity to have their voices heard and stimulates them to become changemakers.
- **Impact Day:** Impact Day is a day of awareness, where light is shined on a topic or international observance, for example, Kindness Day, Earth Day, Day of Peace, Mental Health Day, etc.
- **Impact Your Future:** Programs targeting the development of professional skills: resume writing, job interview skills, personal branding, debate skills, etc.
- **Impact Factory:** Monthly sessions where Aruba Youth Impact members come together, brainstorm and start working on projects they want to implement.
- **Impact Camp:** Once a year during summer vacation (July – August) a three-to-four-day seminar is hosted on the topic of personal leadership of youngsters.
- **Impact Your Life:** Training programs that strengthen social development, personal leadership, communication skills, and confidence.

### Impact

- Engaged 360+ youth between the ages of 14 and 25
- Reached vulnerable youth in Aruba
- Introduced youth to design thinking and problem-solving skills
- Observed progress in the personal and professional development of participants
- Shared results and plans of the 2018/2019 Impact Cafes with the Government of Aruba to inform future policy-making

### Global Money Week



*Project Lead: Central Bank of Aruba*

*Collaborators: Department of Education, Local Financial Institutions, Futura and SETAR*

Global Money Week, also referred to as FERIA di Educacion Financiero, is a global awareness program to teach kids the principles of finances/money in a playful way. During the first week of April, 700 kids from various elementary schools on the island learned about how to earn, save, spend, give back and innovate. The program empowers children and youth not only to learn to manage their finances wisely, but also to help them transfer their knowledge to their families and communities. Futura collaborated with the Central Bank of Aruba and many other financial and non-financial stakeholders to organize the second Aruba Money Week. Futura introduced the participating kids to digital currency. Futura hosted the innovate station, where participants learned the latest about money and digital currencies through gamification.

### Impact

- Stimulated financial inclusion
- Increased awareness among participating kids about the future of money
- 700+ kids participated from different schools

### Immerse Innovation Week



*Project Lead: Futura*

*Collaborators: Metabolic Foundation, ACE Engineering Firm, Mastercard, Deloitte, Midflight, Elite, Aruba Trading Company, Island Takeover, Aruba Tourism Authorities, Gamma IT, Total Services, Central Bank of*

*Aruba, ATECH, Wolff & Co, Makerpedia, DOC, WOW, BAZ-RRR, SKOA, Swingmastersz, Bucuti & Tara Beach Resort, Arubabank, ScubbleBubbles, Aruba Chamber of Commerce, EDUMAX*

During the week of October 28 through November 1, 2019, Futura organized the first of its kind Innovation Week of this magnitude in Aruba. Immerse Innovation Week was brought to life by over 28 partners. More than 40 events, workshops, talks, and meetings were held throughout the week on a wide variety of innovation topics. Together with the main organizing partners ATECH Conference, the Central Bank of Aruba, BAZ-RRR Galleria & Brasserie, Aruba Island Takeover, a movement was created to increase awareness for innovation in every aspect and sector. The aim of Immerse Innovation Week was to make innovation top of mind with the Aruban community as a whole and engage a broader audience in the important discussions about sustainability, creativity and circular economy.

### **Immerse Marquee Events**

The following were the marquee events that took place during the Immerse Innovation Week. The majority of the events were hosted by partners.

#### **Midflight – Futura**

Midflight hosted a workshop with 20 mothers aimed at reinventing motherhood and empower women to honor their creativity and innovative spirit. Hosted by Amy Groome, the workshop was held in the Supernova pop-up space during Immerse Innovation Week.

#### **SDG Brasserie – BAZ-RRR Galleria & Brasserie**

As a social enterprise, BAZ-RRR Galleria & Brasserie, located in downtown Oranjestad has been doing impactful work on achieving the U.N. Sustainable Development Goals through various initiatives throughout the year. BAZ-RRR's social impact is based on social employment for special clients, special Braille menus for the visually impaired, wheelchair accessibility, and also serves as an incubator and motivator for arts and culture hosting local artists. BAZ-RRR hosted various gatherings throughout Immerse Innovation Week in their SDG Brasserie. A creative space where SDG Goal Keepers were invited to inspire, educate and engage the general public to get more people involved in the achievement of the SDGs by 2030.

#### **ATECH Conference: Back to the Future – ATECH**

ATECH Conference hosted its fifth edition in 2019 with the topic of Back to The Future! With a wide range of exciting local and international speakers, workshops and the world-renowned start-up pitch competition. The two-day event welcomed more than 300 attendees, 15+ speakers, 9 workshops, and 8 startups.

#### **The Future of Innovation Conference – The Central Bank of Aruba**

For the fourth year in a row the Central Bank of Aruba organized The Future of Innovation Conference. The topic was The Future of an Aruban Circular Economy; exploring the feasibility and opportunities of an Aruban Circular Economy.

#### **Aruba Island Takeover 2019 – Aruba Island Takeover**

At the end of Immerse Innovation Week, the program was 'taken over' by Aruba Island Takeover. A series of events allowing visitors to connect with the local community and experience the island vibes through music, art and food. With multiple exciting events and workshops throughout Immerse Innovation Week, this collaboration demonstrated that the most unexpected discoveries happen when diverse events and people come together for the greater good.

#### **Immerse Workshops**

Six free workshops were hosted in collaboration with various partners at Futura Café, the pop-up creative hub in the heart of main street Oranjestad.

## Smart Cities 2.0: Examples of the second wave of smart city transformation – Deloitte Digital

A presentation on Smart cities and how the emerging technologies tie into the SDGs for 2030.

## Find out Why: The key to successful innovation – EDUMAX

An interactive workshop helping leaders and individuals at every level understand why customers make the choices they do.

## The Transformation of HR – Gamma IT Solutions

A presentation on how digitalization and new software can impact the future of HR management.

## Video mapping session – Elite Productions

An interactive workshop on the projection technique used to turn objects, often irregularly shaped, into a display surface for projection at various events.

## Digital art – TIMEBAG Cultural

A creative workshop on digital art showcasing the works of international digital artists from TIMEBAG Cultural based in Colombia.

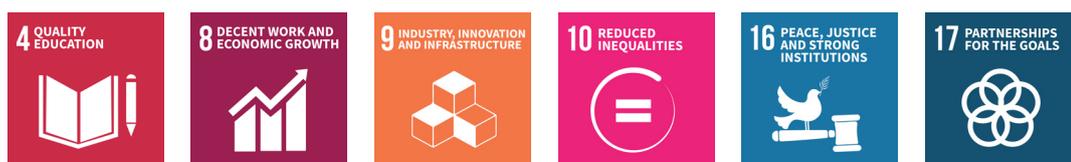
## From College to Career – Daniel Botero

A workshop designed for recent graduates on how to jump start their careers after college hosted by Daniel Botero and Aruba Island Takeover.

### Impact

- 1000+ attendees
- 28+ partners
- 40+ events
- Illustrated how collaboration can create a collective movement to be more innovative
- Stimulated the development of 21st century skills
- Highlighted the innovative ideas and creativity happening around the island
- Added value to product Aruba

## Futura Café



### Project Lead: Futura

*Collaborators: Metabolic Foundation, ACE Engineering Firm, Mastercard, Deloitte, Midflight, Elite, Aruba Trading Company, Island Takeover, Gamma IT, Total Services, Central Bank of Aruba, ATECH, Wolff & Co, Makerpedia, DOC, WOW, Baz-rrr, SKOA, Swingmastersz, Bucuti & Tara Beach Resort, Arubabank, ScubbleBubbles, Aruba Tourism Authorities, Rotaract Aruba, Centro Kibrahacha 60+, EPI, EDUMAX*

Futura Café pop-up was launched during Immerse Innovation Week. The creative hub hosted various key meetings, workshops and events over the course of 8 weeks. Located in the heart of downtown Oranjestad, Futura Café offered meeting spaces, workshop spaces and brainstorm rooms, as well as study spaces for students and life-long learners. Futura Café was brought to life in collaboration with AREA Aruba Re-Imagined Areas, a platform with the aim to ignite economic activity in the city centers of Aruba. The Futura Café project served as a case study and stems from the outcome of a survey conducted in 2019 among store owners on how to solve challenges facing the main street Oranjestad. One of the key findings of the

mentioned main street Oranjestad survey was the need for more F&B business in the area. Aside from serving as a creative hub, Futura Café will provide valuable data that could help support policy making in the future. A detailed report on the findings of the case study will be published in Q1 2020.

### *Impact*

- 1000+ visitors
- Facilitated case study for main street Oranjestad
- Served as a real example of the opportunities and possibilities of repurposing the empty storage spaces or second floors of stores into more livable and creative spaces
- Served as a creative hub for many organizations to host their brainstorming sessions, talks, and meetings
- Brought back many visitors to main street Oranjestad who have not been there in years
- Inspired many building owners to rethink their business models and make their buildings available for new ideas

### **Supernova: An Experimental Studio for Girls**



### *Project Lead: Futura*

*Collaborators: MidFlight, SKOA, Ceque College, Perfect Team Event Planning, Makerpedia, ACE Engineering, Astro Creatives, Refinitiv, Central Bank of Aruba, Aruba Life Organics, Metabolic Foundation, SDG Aruba*

Supernova is an experimental pop-up studio for girls and women of all-ages to connect and exchange ideas, get inspired and learn new skills. Harnessing the meaning of SDG 5, achieving gender equality and empowering women and girls, Supernova aims to empower young women and girls by developing their skills as next-generation of purpose-driven innovators. Supernova kicked-off on October 29 during Immerse Innovation Week. Girls between the ages of 12 and 15 participated in workshops on the topic of Science Technology Engineering and Math (STEM). The aim of the first Supernova session was to stimulate girls to explore future careers in STEM fields. Over 60 girls between the ages of 12 and 15 from various middle schools (MAVO) participated. The event included interactive fireside chats with young Aruban women in the STEM fields that currently are making an impact on the island and internationally. Furthermore, the girls participated in various rapid workshops on topics such as science, 3D engineering, and creative thinking. The girls were also introduced to the SDGs and divided into groups based on the SDGs they felt passionate about. Through team building exercises the groups had to come up with an innovative idea to solve current challenges related to the chosen SDG.

### *Impact*

- Reached 60+ attendees
- Worked with 20+ contributors
- Introduced girls to the possibilities of seeking a career in the STEM industries
- Stimulated the development of 21st century skills
- Contributed towards achieving Goal 5 of the SDGs

## SPACES



*Project Lead: Futura*

*Collaborators: Aruba Tourism Authority, Central Bank of Aruba, GAMMA IT Solutions, Bucuti & Tara Beach Resort, ScrubbleBubbles, WOW Aruba, and Beyond Precision*

An immersive experience highlighting the journey of innovation through visual storytelling of the ideas that are shaping our future. SPACES was a collaboration between organizations, entrepreneurs, and visual artists to raise awareness for important causes identified through the SDGs, including Climate Change, Sustainable Tourism, and Gender Equality.

The main organizations who showcased during the first cycle of SPACES include:

- Ban Serio! Plastic Waste Awareness – *Aruba Tourism Authority*
- Financial Awareness & Cyberschool – *Central Bank of Aruba*
- History of Tech and Innovation – *Gamma IT Solutions*
- Sustainable Tourism – *Bucuti & Tara Beach Resort*
- Life Under Water – *ScrubbleBubbles*
- Gender Equality – *WOW Aruba*

*Impact*

- Reached 100+ visitors per day
- Demonstrated a new way of creating the narrative around innovation and sustainability
- Introduced visual creative storytelling in collaboration with various innovative organizations
- Raised awareness for the SDGs
- Attracted visitors to main street Oranjestad who have not visited in years

## Talent

The Talent space is geared towards the cultivation and retention of local talent with a focus on the skills needed in a future work force, including, 21st century skills. This is key to develop a system that can rapidly adapt to changing skill requirements.

### Mobile Tech Lab (also known as Mo-B Lab)



*Project Lead: Futura*

*Collaborators: Metabolic Foundation and Biblioteca Nacional Aruba*

Mo-B Lab is a first of its kind mobile makerspace for tech education in Aruba. It was officially launched on October 1, 2018. Mo-B Lab, a partly (80%) OCTA EU funded pilot project, is a collaboration with Metabolic Foundation (known as B|Lab), and the National Library of Aruba with support from the Ministry of

Education, Science and Sustainability. Following a very successful year 1 program, Mo-B was nominated for a 'Golden Apple' award for excellence and innovations in education, and Mo-B was also awarded the ACURIL 2019 President's Award by the Association of Caribbean Universities, Research, and Institutional Libraries (ACURIL).

Through Mo-B, we are engaging with (future) educators to discuss the integration of more '21st Century Skills' in schools, exploring the art of digital fabrication and what the benefits of this can be for education in Aruba. Discussions are ongoing with IPA (the national teachers' college), with the aim to involve the next generation of teachers in the makerspace project. This will be achieved by offering more internships and offering the students the opportunity to undertake (thesis) research and to explore alternative ways of teaching. In 2019, one high school trainee from the EPI technical sector participated in the makerspace program. Also, 2019 marked the introduction of makerspace training for teachers.

During the second phase of the Mo-B Lab program in 2019, there was an increased focus on secondary and tertiary education, high schools and the University of Aruba included. Therefore, the new schedule was divided between high schools and elementary schools that did not participate in the program during 2018/2019.

### *Impact Mo-B Lab*

- Provided children and youth with the opportunity to discover a new method of learning about science and technology
- Reached 6,500+ students in 2019
- Engaged the younger generation, inspired the future generation of teachers, interns and aspiring teachers from local schools to adopt new methods of learning
- Visited various events outside the regular after school program (Traimerdia) schedule, including:
  - IPA: two workshops with students (24 Students)
  - Event Stichting Rancho (10+ Kids)
  - Nominated for Appel di Oro Awards (20 School Administrators)
  - YMCA Summer Camp (30 students)

### *Mo-B Teacher Sessions*

While the Mo-B Lab was undergoing maintenance, Metabolic Foundation and Futura organized the second of two teacher sessions, teaching teachers the essentials of being active coaches in maker spaces at schools and/or the Mo-B Lab. The teacher sessions were an introduction to design thinking and digital fabrication for STEAM education in Aruba. The session was hosted at Futura Café pop-up. The teacher sessions included workshops on:

- 3D modeling
- 3D printers
- Laser cutting
- Vinyl cutting
- Programming

### *Impact Teacher Sessions*

- Reached 20+ attendees during the teacher sessions
- Visited 5+ schools in Q4
- Introduced new methods of teaching and learning

## Citizen Science: Tensor Flow Workshops



*Project Lead: Metabolic Foundation*

*Collaborators: Futura, University of Aruba, UNESCO, MIT Media Lab*

Citizen Science aims to promote and empower the community by making science more accessible using open-source and online resources, as well as actively engaging the community in data collection and analysis. Metabolic Foundation, who is spearheading this initiative, secured partial funding for this project from UNESCO for the period of 2018-2019. The activities focused on analyzing air quality, green coverage, ocean acidification, and reef and seagrass coverage. The program is well positioned to contribute to Aruba's Sustainable Development Goals particularly by collecting data needed for the monitoring of SDG 14; Life Underwater and, SDG 15; Life on Land. Futura in collaboration with Metabolic Foundation, University of Aruba and UNESCO, hosted a workshop on machine learning using Tensor Flow to identify coral reef health and mapping. The project aims to provide a platform for 'live data', have air and ocean monitoring stations, and provide advisory reports for the government and stakeholders in the near future.

### *Impact*

- Offered 16+ local developers an opportunity for upskilling
- Introduced local stakeholders and developers to new tools for R&D purposes
- Engaged community with use of data to raise awareness for the SDGs
- Created an opportunity for knowledge sharing

## District 297



*Project Lead: Futura*

*Collaborators: Department of Labor and Research (DAO), Arubahuis, Department of Education, Embassy of the Kingdom of The Netherlands in Washington D.C.*

District 297 is a future-focused platform for Arubans abroad to engage, connect and collaborate toward the socio-economic development of Aruba. We have witnessed a growing need for unity, engagement and community building from our diaspora. The objective is to engage the Aruban diaspora, tap into their intellectual capacity, and leverage their knowledge, network, and ideas to stimulate the Aruban economy. Ultimately, the goal is to bring Arubans together and where possible back home. A landing page was created in 2019 to simplify online registration. Phase 2 of the project will kick off in 2020.

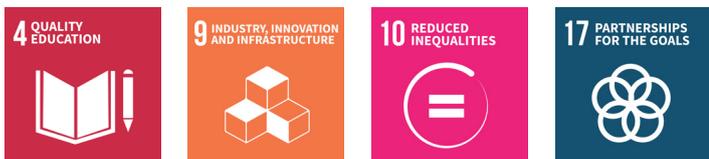
Various think-thank sessions and meetups were held in 2019 among the Aruban diaspora:

- The Hague, April 2019
- Maastricht, May 2019
- Tilburg, June 2019
- Boston, September 2019

### *Impact*

- Connected with the Aruban Diaspora to get their input on the national innovation priorities
- Engaged 250+ Arubans abroad since inception

### **eLearning Pilot Program Cacique Macuarima**



*Project Lead: Futura*

*Collaborators: SKOA, Cacique Macuarima School*

The Cacique Macuarima and Aterima schools in Santa Cruz (hereinafter: CMA) are known for having energetic and pro-active teachers, as well as a very active parents committee. Together they have identified innovation opportunities and have in recent years made significant investments to take steps towards eLearning, the incorporation of more STEM in the school’s curriculum, and the development of 21st century skills. The parents committee proactively reached out to share their innovation vision for the school. The committee has done significant research in close collaboration with the school. Their vision was to digitize the CMA classrooms and equip the school and teachers with the right tools to enable CMA to expand its digital education offering and STEM curriculum. It was hence, in consultation with SKOA, decided that CMA is the ideal candidate for the first eLearning Pilot Program.

The pilot program entails equipping the schools with eBoards, laptops, tablets, VR Goggles, while providing (ICT)-training to the teachers to facilitate eLearning. The program supports one of the key objectives defined in our strategy, specifically the ‘Talent’ innovation space: cultivating and retaining talent with a focus on skills for the future workforce. The program further supports key objectives of the Plan Educacion Nacional 2030 (PEN) and was designed and implemented with key education stakeholders and in close collaboration with SKOA. This pilot was a great collaboration opportunity between key innovation and education stakeholders and helped built necessary momentum for the PEN.

The second pilot program will kick off in 2020 at a different school. Once the preliminary results of the second pilot are available, an evaluation will occur on the feasibility and impact of a nation-wide roll-out for the remaining schools.

### *Impact*

- Facilitated personalized assignments based on strengths and weaknesses (personalized learning)
- Designed content for a students’ individual level of skill/ability (personalized learning)
- Facilitated access to in depth statistics on student test results
- Incorporated more STEM subjects using actual technology equipment instead of just or mainly teaching theory
- Introduced students to coding and programming
- Improved level of digital literacy of students
- Introduced an interactive and stimulating digital environment, ‘playful’ learning experience
- Increased engagement of the students during classes
- Increased 21st Century Skills development in classrooms
- Empowered teachers and students
- Met key objectives of the PEN

## SDG Games



*Project Lead: Futura*

*Collaborators: SDG Aruba, SKOA, DPS*

SDG Games was a pilot program that targeted 1-3 elementary schools, grades 5 and 6 ages of (10 and 13) to raise awareness for the SDG's. The schools were in the districts of Dakota, Tanki Leendeert, and Paradera. The SDGs were presented in the form of the traditional Game of the Goose (Ganzenbord). The program kicked off with a 5-minute introductory video about the SDGs simplified for kids. This was followed by the board game and concluded with an outro video transforming the SDG concept into more actionable points for kids. At the end of the game, kids answered two questions electronically on which SDG they feel is most important to them and what they will do to achieve it by 2030. Every student received a sticker as prize for participation and the winner of each group received an SDG Superhero sticker.

The SDG Games will be part of a broader national awareness campaign with long-term outlook that is currently in development with key stakeholders.

### *Impact*

- Raised awareness among kids about the SDGs through innovation and playful techniques
- Reached approximately 360+ children between the ages of 10 and 13
- Served as part of a toolkit for future SDG awareness programs among youth, which can be used independently by teachers and schools in the future
- Facilitated testing of a specific element of a broader national awareness campaign



## Aruba Maker Expo



*Project Lead: Metabolic Foundation*

*Collaborators: Futura and Biblioteca Nacional Aruba*

The Aruba Maker Expo was organized for the first time at the National Library to celebrate and promote the maker movement on the island. Furthermore, the Aruba Maker Expo marked the closing of the first academic year for Mo-B Lab, the Mobile Tech Lab. A partnership between various organization on the island the Aruba Maker Expo brought together 40 partners who hosted various workshops, expositions, and other events.

Workshops included:

- Kite making
- Hour of Code
- Introduction to electro
- Zero waste products
- Natural foods from Aruba's "mondis" (woods)
- Plastic Beach Party's collection box making
- Tiny library from palettes
- AI with Google
- VR escape room
- Laser cutters and 3D printers
- Robot & drone racing

*Impact*

- Reached 1000+ attendees
- Introduced 40+ makers and partners to the local community
- Hosted 11 workshops



## Innovation Camp



*Project Lead: Futura*

*Collaborators: Swingmasterz, Beyond Precision, Aruba Life Organics, SETAR, Eduardo's Beach Shack, Aruba Tourism Authority, Dr. Edward Cheung, Plastic Beach Party, Scubblebubbles, Goshen Organic Farm, Zero Waste, IPA, Fantasy Tours, Mo-B Lab, and Arubiano*

The Innovation Camp is a kid's camp focused on the development of 21st century skills. The aim of the Innovation Camp was to build on the previous success of the Kids4Bytes Coding Camps held during 2018. The program was designed for children between the ages of 7 and 12; however, it could be easily adapted to fit other age groups. The Innovation Camp incorporated frameworks such as the SDGs and the Government of Aruba's human-centered national innovation strategy Aruba Innova 2030. These frameworks insured that the participants could immerse in various challenges that our island is facing and come up with real possible solutions.

The weeklong program consisted of two cycles each day with the two age groups. The activities included, SDG Board Game, Design Thinking, Coding and Robotics, Creativity, Zero Waste Workshop, Plastic Recycling Workshop, Coral Reef Conservation Workshop, and Food Systems Aruba. The program allowed kids to experience the real challenges that the island is facing and guided them to create their own sustainable solutions.

Aside from the children's participation in the program it offered the opportunity for future teachers to get hands-on experience during the Innovation Camp. A group of IPA students based their academic project on the findings of the Innovation Camp.

### *Impact*

- Reached 60 kids
- Introduced interdisciplinary and multidisciplinary way of learning new subjects
- Designed course by experience not by lecture. "Learn by doing" concept was applied
- Taught systematic way of identifying problems and creating viable, feasible & desirable solutions
- Created a safe space where "creativity and confidence" was an integral part of the learning process
- Built 5 prototypes as solutions to environmental challenges Aruba faces
- Presented 10 creative/innovative solutions to challenges Aruba is facing

## Advanced Coding Workshop



*Project Lead: Futura*

*Collaborators: GAMMA IT Solutions and SETAR*

Based on the demand for workshops during the Kids4Bytes kids coding camps and feedback received from parents, Futura together with partners Gamma IT Solutions and Setar N.V., organized an advanced coding workshop. The coding workshops were aimed at children ages 10 through 12.

### *Impact*

- Reached 50+ kids
- Introduced more advanced methods of coding to kids
- Helped identify future talent

## Outstanding Innovator Award



*Project Lead: Futura*

*Collaborators: Government of Aruba*

In 2019, the Government of Aruba introduced an Outstanding Innovator Award for members of the Aruban community that showed true leadership in driving the change the island seeks. Change-makers can be from any sector to stimulate island wide systemic change. The first award was given to Ms. Sharin Luydens, Director of Censo and the second award was given to Ms. Jharonne Martis Director of Consumer Research at Refinitiv. The Outstanding Innovator Award's purpose to highlight home-grown innovations and change-makers, and create awareness for important causes.

### *Impact*

- Rewarded key innovators for their outstanding work and contribution to Aruba
- Encouraged a solution driven mindset within the community
- Highlighted the diversity of innovative initiatives



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## Entrepreneurship

A key element of a thriving innovation ecosystem is the presence of successful entrepreneurs. Through its programs and investments, Futura looks to partner with key programs and organizations to foster an entrepreneurial mindset and improve business climate for startups and SMEs.

### ABIA - Aruba Business Incubation Association



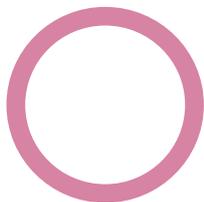
*Project Lead: Futura*

*Collaborators: Chamber of Commerce Aruba, University of Aruba, Government of Aruba, Aruba Tourism Authorities, Department of Economic Affairs and Industry, key private sector partners including but not limited to Aruba Trade and Industry Association, Hope Aruba Foundation, 360 Innovation, Qredits*

A key strategy to stimulate successful entrepreneurship involves the setup and encouragement of incubator programs. The Aruba Chamber of Commerce (KvK) has led the development of a new program with support from COSME (an EU program) and input from local private stakeholders. Futura joined the KvK and the University of Aruba in November 2018 to collaborate on the set up of an incubator program for SMEs. A major milestone for the Aruban startup community was the official signing of the Letter of Intent between the Government of Aruba, private sector partners, Aruba Business Incubator Association (ABIA), the Aruba Chamber of Commerce and the University of Aruba to officially launch ABIA. The next step is to agree on milestones to be achieved in 2020 with key private sector stakeholders, followed by the appointment of a Community Manager.

### *Impact*

- Streamlined incubator movement around the island
- Aligned key stakeholders to stimulate the entrepreneurial ecosystem in Aruba



## Smart Society

The goal of the Smart Society innovation space is to develop key arenas of collaboration between the public and private sectors and citizens, to increase engagement in developing smart city and circular economy policies. As part of this, it is the intention to incorporate smart city concepts in planning projects, including internet-of-things to stimulate more data-driven policies and decision-making.

### AREA



*Project Lead: Futura*

*Collaborators: DOW, Aruba Tourism Authority, and Government of Aruba*

Aruba Re-Imagined Areas (AREA) is an Innovation District Platform to help re-imagine and re-design key business and innovation opportunity areas in Aruba, and in turn ignite economic energy and increase the quality of life in those areas.

At the core of a future sustainable district or area is its community and collaboration to address local challenges. The focus in 2019 was on the largest districts on the island Oranjestad and San Nicolas.

### *Impact*

- Facilitated stakeholders' request to the Government on the opening of main street Oranjestad for car traffic at certain off-peak hours
- Coordinated with DOW to ensure repairs of lightning fixtures in Oranjestad identified by stakeholders
- Inspired the opening of a movie theater in San Nicolas
- Collaborated with store owners to introduce a live events calendar for main street Oranjestad
- Facilitated the decision on the opening of A.T.A.'s tourism office in San Nicolas
- Introduced new energy into Oranjestad with the introduction Futura Café pop-up in main street



# Awareness Raising Initiatives

As part of the overall strategy to raise awareness about the importance of innovation and the future of work demands, Futura hosted or facilitated a wide variety of presentations and workshops on the importance of innovation, the 2030 SDGs and 21st Century Skills. Below is a high-level overview of some notable workshops and presentations during 2019.

## Workshops and Presentations

### Aruba Innovation Summit 2019

*Partner: eGovernance Academy Estonia*

The second annual Aruba Innovation Summit was held during the month of February 2019. The Aruba Innovation Summit was a gathering of stakeholders to discuss the overall vision of eGovernment with presentations by experts from Estonia's eGovernance Academy and key stakeholders. Furthermore, innovation indicators and performance measuring strategies were explored.

### Design Immersion Week

During the week-long Design Immersion Week, Futura hosted various workshops on Human-Centered Design Thinking and Policy-Making with design thinking expert Dr. Melis Senova. The sessions were held with various stakeholders on the island with the aim to equip public sector employees with the skills needed to make problem solving more efficient and effective for them and their organization and to get their input on capacity building for innovation.

### Futura Website Launch & Year End Review

In February 2019, the Futura website was launched and the Year and Review was presented to our various stakeholders and innovation collaborators during a connection hour.

### UNDP Aruba Visit – Futura Initiatives

*Partner: UNDP*

During the visit of Mrs. Marina Walter, UNDP Resident Coordinator, Futura presented the Aruba Government's innovation strategy and vision, and provided an overview of ongoing initiatives. As a result, UNDP agreed to support Aruba with funding submissions for potential 2020 social innovation project grants of up to \$100,000 per project and technical support in preparation for the project proposals.

### Silver Entrepreneurs Design Thinking Workshop

*Partner: Department of Economic Affairs, Commerce and Industry, and Idea*

Together with the Department of Economic Affairs, Commerce and Industry's Idea program, Futura hosted a design thinking session with recent retirees aiming to become entrepreneurs. In this unique workshop we provided great insights and tips on problem-solving and developing more feasible ideas.

### Innovation Collective: Venture Mapping

*Partner: Aruba Investment Bank*

Futura together with The Innovation Collective hosted three Venture Mapping brainstorm sessions with various stakeholders focusing on venture and community mapping and venture fund mapping. Using the Innovation Collective model, during the venture fund mapping sessions, participants learned about creating investment opportunities, refocusing funding systems and building inclusive communities.

During the venture and community mapping session, using the same model, participants learned how the model could be used to create jobs, refocusing education systems, and building inclusive communities.

### **Cas di Cultura Design Sessions**

*Partner: Cas di Cultura*

Futura assisted Cas di Cultura with a design thinking session. The session hosted 12 youth members of the theater community seeking to discover what innovative solutions entail. The focus was to stimulate more youth participation in the arts community at Cas di Cultura.

### **University of Aruba Orientation Week 2019**

*Partner: University of Aruba*

During the University of Aruba's Orientation Week, Futura hosted 6 sessions including a rapid design thinking session on local challenges and the inspirational presentation on how to trailblaze into the future.

### **WOW: DARE TO BE Conference 2019**

*Partner: WOW Aruba*

Futura assisted the WOW organization with the realization of their first ever DARE TO BE Conference. DARE TO BE Conference is a practical, participatory and inspiring event offered through the WOW Aruba organization with the aim of empowering male & female graduates, young professionals and everyone who is willing to step up their game in Aruba.

### **UN Women Aruba Forum**

*Partners: SDG Aruba and UN Women*

Futura presented its key achievements and initiatives since its inception and presented its plans for the upcoming year and beyond to the representative from UN Women in November 2019. Focusing on gender equality, Futura highlighted one of its key initiatives this year, namely, Supernova and its strategy moving forward.



# Strategic Partnerships and Collaborators

Futura initiatives and programs are only possible with the support and collaboration of our partners. Partnerships are an essential part of accelerating innovation to achieve the desired systemic change and create a thriving innovation ecosystem.

## Key Futura Partners and Collaborators include



# Boards and Commissions

As a national innovation lab, Futura is a member of various think-tanks, project boards, working groups and committees, where it serves as a strategic- or knowledge partner. Futura is an active innovation partner to many key stakeholders on the island. This ensures that innovation remains top of mind in policy- and decision-making and that national plans and strategies are aligned. Below is an overview of key Futura roles and participation in 2019.

## **Aruba Centre of Excellence for Small Island Developing States (SIDS)**

*Role: Project Board Member*

The Centre of Excellence aims to strengthen innovation and resilience in SIDS as they address the challenges of sustainable development. It offers a platform to exchange knowledge and experiences between SIDS, especially with regard to Sustainable Tourism, PPPs, Sustainable Energy and Social innovation. The Centre of Excellence program is currently under transition to the new SISSTEM Faculty of the University of Aruba.

## **Aruba Happy Flow Project Board**

*Role: Project Board Member*

The Project Board is responsible for development of the Happy Flow 2.0 (phase 2) roadmap to create a seamless end-to-end passenger experience. Project Board members include representatives of AAA, KLM, Vision-Box and the Government of Aruba. Phase 2 partners further include the World Tourism and Travel Council (WTTC) and local hotel and car rental partners.

## **Aruba SDG Commission**

*Role: Innovation Liaison*

The Aruba SDG Commission has the mandate to establish the SDG strategic framework and guide the national implementation process.

## **National Strategic Plan Working Groups**

*Role: Member of SDG Expert Working Groups / Pillars People, Planet, Prosperity, Peace, and Partnerships*

The National Strategic Plan will align national policies across sectors and ministries to achieve the SDGs by 2030.

## **Nationaal Onderwijs Plan (NOP) 2030**

*Role: Knowledge Partner and Collaborator*

The NOP 2030 (National Education Plan) aims to bring stakeholders together to achieve a unified vision for the future of education in Aruba. The NOP was published during Q2 of 2019.

## **University of Aruba | SISSTEM Faculty**

*Role: Strategic Partner*

The new program at the University of Aruba, Sustainable Island Solutions through Science, Technology, Engineering and Mathematics, will offer Bachelor, Master, and PhD programs in various STEM fields. The program is funded by the EU and went live in September 2019.

## **University of Aruba | Faculty of Arts & Science: Organization, Governance & Management**

*Role: Strategic Partner*

Futura supports the program to ensure research on topics important to fostering of innovation and knowledge capacity of our island are prioritized.

# Looking Ahead: 2020

Futura will continue to play an active role in fostering Aruba's innovation ecosystem in 2020. Sign up for our newsletter, Futura Nodes, to stay updated on our projects, collaborations and opportunities.

## Project Pipeline 2020

Below is a quick list of key 2020 projects. Note this list is not meant to be exhaustive. Follow Futura on social media or contact us at [hello@futorialab.org](mailto:hello@futorialab.org) to find out more!

- 100 Innovations
- B-Lab Santa Cruz
- eLearning Pilot Phase 2
- Supernova
- Future of Work Vocational Training
- Mobile Library (Bibliobus)
- Innovation Summit 2020
- District 297 Phase 2
- Global Money Week 3
- Innovation Week 2020



*From our small but mighty team, a heartfelt thank you for being part of the innovation movement. Looking forward to continuing the joint journey towards a resilient future!*

